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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,541	08/23/2001	Michael A. Vaudrey	10551/218	7941

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WASHINGTON, DC 20005

EXAMINER

ABEBE, DANIEL DEMELASH

ART UNIT	PAPER NUMBER
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2655

15

DATE MAILED: 10/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/934,541

Applicant(s)

VAUDREY ET AL.

Examiner

Daniel D Abebe

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 181-189 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,181-189 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 8
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/02/2003 has been entered.

Notice of receipt

The preliminary amendment and the substitute declaration both filed on 11/19/2001 have been recorded.

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Applicant is advised to renumber claims 1 and 2 in the future accordingly.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

I. Claims 1, 2, 182, 186 and 188 are rejected under 35 U.S.C. 102(b) as being anticipated by Mandell et al. (4,799,260).

As to claim 1, Mandell teaches a system for providing speech to remaining audio adjustment, comprising:

an audio decoder (Fig.9, 400) for simultaneously receiving a first signal comprising a low frequency audio component representing speech (Fig.9, 404) and a second signal comprising a high frequency audio component representing sound other than speech (Fig.9, 402), wherein the two signals are separately received and processed at the decoder (abstract; Col.15, lines 54-65; Col.2, lines 38-51; Col.3, lines 63-68).

As to claim 2, Mandell teaches the corresponding method comprising the steps of:

receiving at a decoder a high frequency component representing a high frequency background sound and a low frequency component representing speech signal where the two signals are separately received by the decoder (Fig.9).

As to claims 182 and 186, Mandell teaches where the received signals contain spatial/directional information that are recorded on two channels (abstract; Col.2, lines 60-64).

As to claim 188, Mandell teaches where the directionality of the separately decoded first signal and second signal are separately enhanced/adjusted based on the directional information contained in the signal (Col.15, lines 54-66; Col.2, lines 38-41).

Claim Rejections - 35 USC § 103

II. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

III. Claims 181 and 185 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandell et al. as applied to claims 1 and 2 above, and further in view of Morrison (5,809,472).

As to claims 181 and 185, Mandell doesn't explicitly teach where the signals are digital bit stream. Morrison, however teaches an audio decoder (Fig.3, 70) for separately decoding a first signal representing speech (Fig.3, 82) and a second signal representing signals other than speech (music, Fig.3, 84), where the first signal and the second signal are in digital form. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Mandell's teaching to transmit/receive the signals in digital bit stream, in view of Morrison, for the purpose of providing an alternative means for transmitting the signals that improves the quality of the reproduced audio signals.

IV. Claims 183, 184, 187 and 189 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandell as applied to claims 1, 2 and 188 above, and further in view of Cole (3,583,803).

With regards to claims 183, 184, 187 and 189, Mandell doesn't explicitly teach where a user is provided with a separate adjustment device for adjusting the signals. Cole teaches, in a motion picture system, an audio recording device where the audio recording device includes multiple sound stripes for separately recording music and speech signal and where a separate volume/amplitude adjustment device is provided for separately adjusting the amplitude of the two signals during reproducing the signal for each listener/passenger (Col.4, lines 5-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine Cole's teaching where separate adjustments are provided to the listener with Mandell's teaching, because, Mandell's system is used in a motion picture theater where it is desirable to enhance one sound over the other, based on Cole's disclosure, an artisan would recognize the desirability of providing separate adjustments devices in order to allow the listener control the output value of the different sounds.

Response to Arguments

V. Applicant's arguments filed on June 3, 2003 with regards to claims 1-2 and 181-189 have been fully considered but they are not persuasive.

Applicant's argument is mostly concentrated on the alleged failure of Mandell to teach where "the decoder receives a first vocal signal and a second other than vocal signal" applicant further asserts that "Mandell's signals are all sounds and are not distinguished". The examiner disagree. First of all the purpose of Mandell's art is for separately enhancing the spatial information of the speech (vocal) signal and the background signal where the speech signal is accompanied by the background (non vocal) signal such as a background music in motion pictures. Mandell explains "in application such as in motion picture theaters it maybe desirable to enhance only the directionality of only the speech signal from actors not music or the other background signal" (Col.15, lines 54-58). As previously stated, According to Mandell the high frequency components represent background audio signal (such as music) and the low frequency component represent mainly speech (Col.15, lines 54-65). Mandell clearly states where speech sound are distinguished from background sound and separately decoded, "the frequency components (lower frequency component representing mainly speech) are separately decoded at block 404" while "high frequency component representing background music are separately decoded at block 402" see Col.15, lines 60-62 and Col.16, lines 37-42 emphasis mine. Fig.9 also shows where "speech" signals and "background audio signals" are separately received and decoded. Accordingly, the examiner believes applicant's argument to overcome Mandell's art is not persuasive.

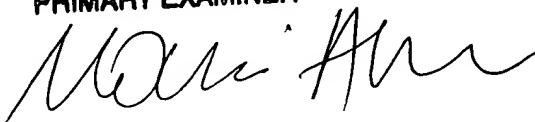
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D Abebe whose telephone number is 703-308-5543. The examiner can normally be reached on monday-friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

DANIEL ABEBE
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Daniel Abebe', written over the printed name.

October 20, 2003